

SPRING 1972

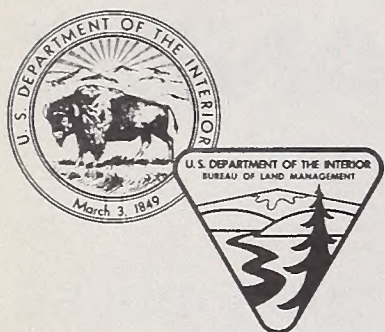
# OUR PUBLIC LANDS

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THEY PAID THE FIDDLER  
GLADLY . . . page 12







U.S. DEPARTMENT OF THE INTERIOR  
Rogers C. B. Morton, Secretary

BUREAU OF LAND MANAGEMENT  
Burton W. Silcock, Director

As the Nation's principal conservation agency, the Department of the Interior has basic responsibilities for water, fish, wildlife, mineral, land, park, and recreational resources. Indian and Territorial affairs are other major concerns of America's "Department of Natural Resources."

The Department works to assure the wisest choice in managing all our resources so each will make its full contribution to a better United States—now and in the future.

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Jim Robinson, Editor

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# OUR PUBLIC LANDS

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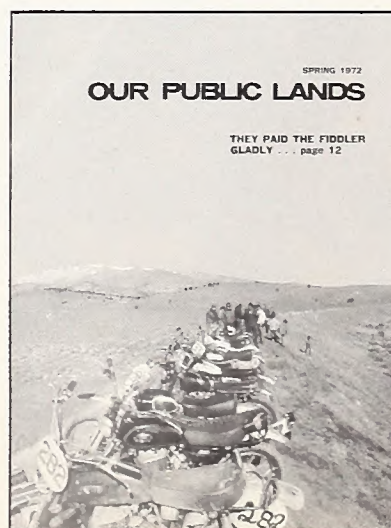
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Recognizing legitimate uses and users of the public lands is sometimes a problem—but one group made it easy. (Photo by John D. Carlson.)



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# HIGHLIGHTS

## **Poisons for Predator Control Restricted by President Nixon**

Chemical toxicants for predator control which kill or cause secondary poisoning of wildlife on the public lands are restricted by an Executive order issued by President Richard M. Nixon in February.

The order was issued following release of an independent study commissioned by the Federal Government which recommended stopping the use of poisons for controlling predatory wildlife. Results of the study were forwarded to the President by Secretary of the Interior Rogers C. B. Morton and Russell E. Train, Chairman of the Council on Environmental Quality.

Henceforth, the order said, "all such mammal or bird damage control programs shall be conducted in a manner which contributes to the maintenance of environmental quality, and to the conservation and protection, to the greatest degree possible, of the Nation's wildlife resources, including predatory animals."

## **President Orders Off-Road Vehicle Regulations and Trail Designations**

Off-road vehicle use on the public lands shall be regulated to protect natural resources, all users of the lands, and to minimize conflicts among the various uses of those lands, according to an Executive order of President Richard M. Nixon in February.

The order directed land managing agency heads to develop regulations for use of off-road vehicles and to designate specific areas for trails on public lands for the use of off-road vehicles.

*(See Cover Story page 12).*

## **Public Land Grazing Fees To Increase 3 Percent in 1972**

The Department of Agriculture and the Department of the Interior have announced that charges for grazing livestock under permit on Federal lands administered by the Forest Service and the Bureau of Land Manage-

ment will be limited in 1972 to an increase of 3 percent above levels existing in 1971.

This rate applies only to 1972 grazing fees. The overall objective of grazing fee adjustment to reach fair market value, instituted by both Departments in 1969, remains unchanged.

Limiting the fee increase to 3 percent will hold the line on ranch operating costs in 1972 and support President Nixon's economic stabilization program. The fee for grazing on Federal lands administered by BLM will increase from 64 cents to 66 cents per animal unit month. Limitations on fee increases do not apply where fees are established by competitive bid.

## **"The Last Frontier" Is Selected For 7th World Forestry Congress**

"The Last Frontier," a film sponsored by the Bureau of Land Management, will be one of four and the Federal entry in film festival competition during the 7th World Forestry Congress in Buenos Aires, Argentina, in October.

The film's theme focuses on what it describes as America's rapidly shrinking wild lands as a result of an expanding civilization. The script concludes that future management of some 450 million acres of Bureau of Land Management lands rests with the American people.

More than 20 million people have seen the film.

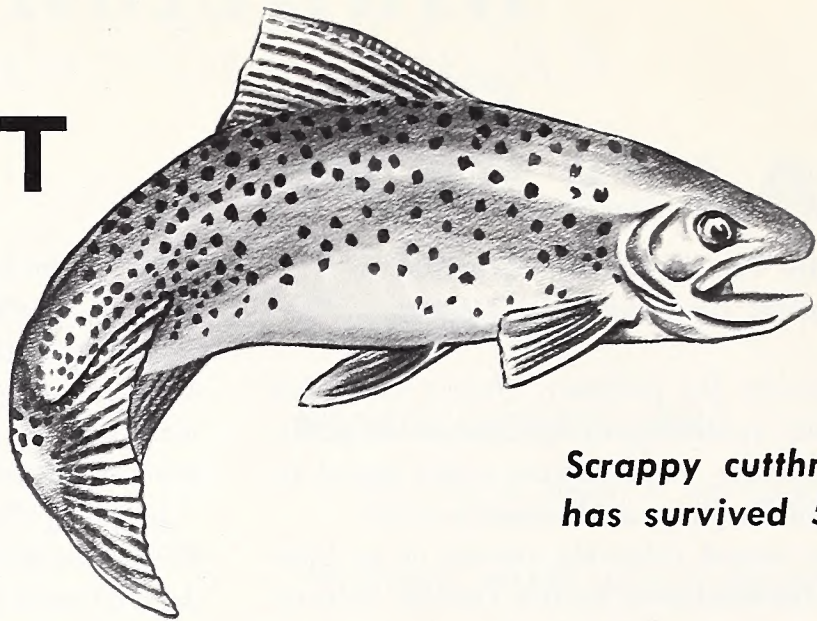
## **Western Oregon Timber Sale Offer To Total 1,225 Million Board Feet in Fiscal 1973**

Timber sales totaling 1,225 million board feet from lands administered by the Bureau of Land Management in western Oregon will be offered during fiscal year 1973.

The total sale offer figure conforms to previously announced policy of adjusting the level of sales of a 3-year period to compensate for unusually heavy past salvage operations that were made necessary by natural disasters such as the 1962 Columbus Day storm and the 1966 Oxbow fire.



# MORE THAN JUST A FISH



*Scrappy cutthroat trout  
has survived 500 centuries*

**T**HE LITTLE brine pond in the vast wastelands kept growing. That phrase, "kept growing," is a relative term in geology. The growth was over a period of thousands of years ago, just how many is not known precisely.

Some 50,000 years ago the giant fresh water lake, which the little pond became, covered nearly 20,000 square miles of what are now parts of Utah, southern Idaho, and eastern Nevada. Geological historians record the great body of water as Lake Bonneville.

As a lake, Bonneville lasted about 25,000 years. When Lake Bonneville receded, it left a record of its shoreline in the form of hundreds of miles of shore beaches, terraces, and wave-cut cliffs which formed along its mountainous shores. The Great Salt Lake of Utah and Utah Lake are the only shrunken remnants of that massive body of water.

Pre-Bonneville was a time of alternating lakes and deserts, but gradually over thousands of years the cold wet years predominated and there was less evaporation

until Lake Bonneville had a maximum depth of 1,000 feet. This would have put the present day Salt Lake City under 850 feet of water.

Lake Bonneville was a product of the late Cenozoic era. Ice sheets—the last great ice age—covered much of Europe and North America. The dinosaurs had been extinct for 120 million years, large mammals had reached their highest development, modern plants and animals had begun to evolve, the mountains of Europe and Asia were already very old, and the mountains of western North America were already more than 11 million years old.

On the shores of Lake Bonneville roamed the hulking mammoth, the lumbering musk ox, and predecessors of the modern camel and horse. Commercial removal of gravel deposits along the base of the Wasatch Mountains near Salt Lake City have uncovered the remains of these creatures. In a Lake Bonneville shoreline cave some years ago, a camel skull was discovered, probably the result of a carnivore dragging its prey there.

Little is known about the aquatic life in the waters of Lake Bonneville, but it must have teemed with many creatures. Now, in the dry beds of old Lake Bonneville, there can be found the fossil remnants of gastropods: terrestrial mollusks, including snails, slugs, and limpets. These fossil remnants are all that remain of the aquatic life—and in the Bonneville basin tributary streams a colorful little fighter: the Bonneville cutthroat trout.

It is known that Lake Bonneville and many of its tributary streams and rivers contained native cutthroat trout, which originally gained entrance to the lake system from the Snake River. Originally at its maximum depth, Lake Bonneville, overflowed to the north

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By **FRANK H. DODGE, JR.**

Fisheries Biologist  
Nevada Department of Fish and Game,  
Ely, Nev.

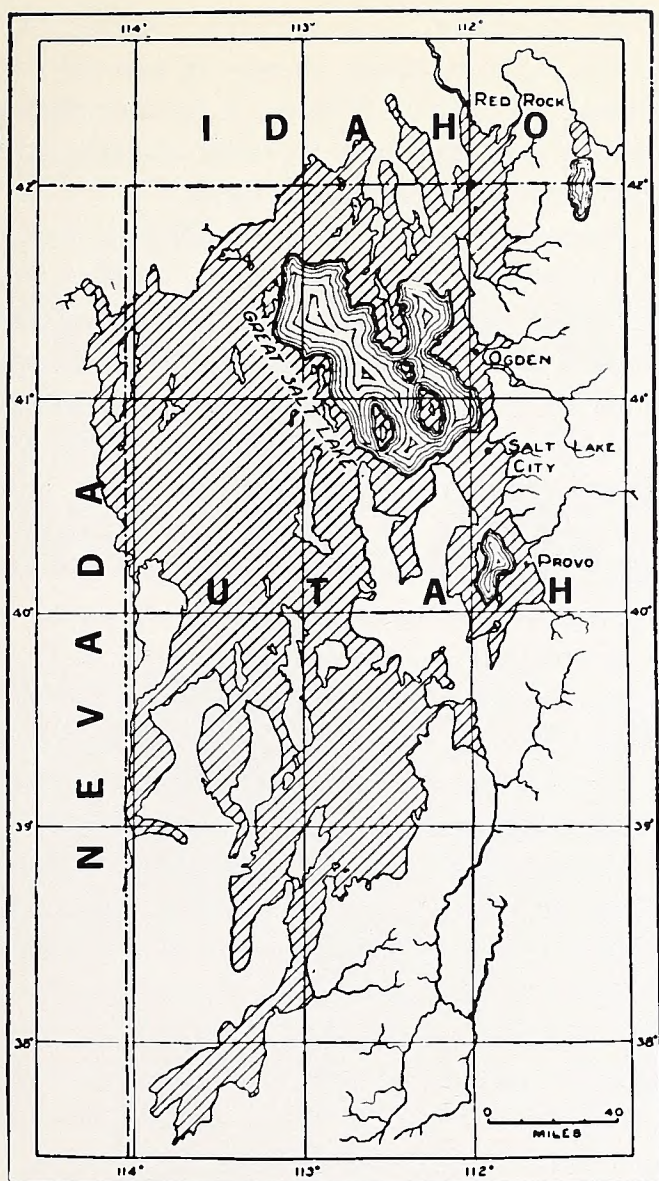
and

**DONALD R. CAIN**

Wildlife Specialist  
BLM District Office, Ely, Nev.

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through Red Rock Pass in southeastern Idaho to the Snake and Columbia Rivers.

As the level of the lake receded over thousands of years, because of diminished rainfall, the trout became isolated and evolved into a separate subspecies called Bonneville cutthroat trout (*Salmo clarki utah*). Early pioneer settlers called them Utah cutthroat trout.

In the early 1800's these trout were plentiful in Utah Lake and many tributaries to Bonneville basin. They could not survive in the Great Salt Lake because of its salinity.

The largest cutthroat trout ever taken from Utah Lake was recorded as weighing 15½ pounds. The average, however, weighted about 1 pound. Early settlers took these highly prized fish commercially in large quantities. For example, the record books list a commercial fisherman hauling in from 3,500 to 3,700 pounds of trout daily in 1846. By 1872, however, his yield diminished considerably. As early as 1874, trout conservationists began to express their concern about the dwindling population of trout in Utah Lake.

While much of the habitat of the cutthroat trout was eliminated when Lake Bonneville receded, white settlers certainly played a part in bringing the fish near to the brink of extinction. As the western public lands were brought under agriculture, construction of irrigation dams on tributaries blocked access to spawning beds. Then, too, indiscriminate stocking of exotic (non-native) fish eliminated many pure strains by virtue of crossbreeding.

Testimony by old timers shows that, prior to 1881, pioneer settlers transplanted cutthroat trout from streams tributary to the western Bonneville basin. These cutthroat trout transplants were into streams completely separated from the basin. The only known tributary stream remaining in the western basin which is believed still to contain a pure strain of Bonneville trout is Hampton Creek on Mount Moriah in eastern Nevada. Today only one of the streams into which transplants were introduced, Pine Creek on Mount Wheeler in eastern Nevada, contains what is believed to be a pure strain of Bonneville trout.

Since the discovery of trout in Pine Creek, the Nevada Department of Fish and Game has regarded it as the last remaining population of a pure strain of Bonneville cutthroat trout outside the basin, and have protected it from fishing. The Bonneville cutthroat trout is considered an endangered subspecies by the International Union for the Conservation of Nature and Natural Resources, an international conservation organization headquartered in Morges, Switzerland. The fish is so listed in their "Red Data Book" although it is not recognized as an endangered species by the U.S. Department of the Interior.

In 1960, the Nevada Department of Fish and Game sought to assure the perpetuation of the Pine Creek trout by introducing 54 of them into Goshute Creek, a 5-mile barren stream on public lands in the Cherry Creek Range in eastern Nevada. Several years later, the State Fish and Game officers asked the Bureau of Land Management to assist in the project by cooperatively developing a habitat management plan for Goshute Creek. As a part of this plan, several small earthen dams were constructed to provide rest areas and cover for the small fish.

By 1970, this new population had increased sufficiently to become self-supporting, a characteristic which has enabled the feisty battlers to endure over thousands of years. Because of this success, that same year 50 cutthroat trout were transplanted from Goshute Creek into Weaver Creek, another barren stream on public lands in the Snake Range in east-central Nevada.





Electro-shocking used to catch fish for transplanting, dazes but doesn't injure them.



Installing trash catcher.

Weaver Creek offers good aquatic habitat created by recently constructed beaver dams.

Meanwhile, repeated tests, including serological examination and protein analysis conducted at the request of the Nevada Department of Fish and Game, failed to establish that the trout in Pine Creek were identical to Bonneville cutthroat trout. Finally, in 1970, Dr. Robert Behnke of the Colorado Cooperative Fishery Unit, Colorado State University, was asked to determine whether the Pine Creek trout were actual specimens of Bonneville trout.

In his study Dr. Behnke compared the Pine Creek trout with museum specimens of known Bonneville cutthroat trout. He believes on the basis of his examination that the Pine Creek trout, while being similar to the Bonneville trout, have sufficiently different body characteristics to be called a separate subspecies.

On this premise, he now believes that Lake Bonneville may have contained two distinctive subspecies of cutthroat trout: the Bonneville cutthroat trout was probably native to the eastern part of Lake Bonneville, while his newly identified subspecies was indigenous to the western portion.

On the one hand, some scientists believe that the Bonneville cutthroat trout already is extinct. On the other hand, Dr. Behnke believes it is likely that populations may still exist in small, isolated streams in remote areas of the Bonneville basin.

Dr. Behnke's findings prompted Nevada Fish and Game officers and BLM to inventory other Nevada streams which drain into the western Bonneville basin. Populations of cutthroat trout similar to the subspecies identified by Dr. Behnke have been found in Mill Creek and Hendry's Creek in the Humboldt National Forest, but he believes they have crossed with exotic rainbow trout.

Probably the most important role BLM has played in the protection of the cutthroat trout on public lands is the designation and segregation of lands in Goshute Creek and Weaver Creek drainages. Under the Classification and Multiple-Use Act of 1964, BLM has designated them as the Goshute Canyon Natural Area and Weaver Creek Scenic Area.

For the future, the Nevada Department of Fish and Game and BLM plan additional stream improvements in Goshute Creek: the installation of small obstructions in the stream to create pools for cover and resting areas, and the construction of a large pond at the lower end of Goshute Creek to prevent loss of fish downstream into irrigation ditches. Livestock grazing in Goshute Canyon will be regulated to keep the animals from trampling the streambanks and in the water. This will be regulated to improve watershed conditions and enhance streambank cover.

If the transplant of cutthroat trout into Weaver Creek is successful, similar stream improvements will be planned there. Moreover, habitat protection and improvement are not the only steps being taken to preserve the cutthroat trout. The Nevada Department of Fish and Game plans to experiment with rearing trout from Pine Creek under hatchery conditions.

Although these trout are certainly an example of the ability of a wildlife species to survive in restricted habitat, they also are a prime candidate for extinction if anything happens to alter their limited environment.

A primary concern of both the State and Federal organizations is the preservation of the pure existing strains of these cutthroat trout through species management and habitat management.

A step has now been taken to prevent this colorful remnant of early America from joining the list of extinct American wildlife species. After surviving the rigors of 500 centuries, the scrappy cutthroat have become a symbol of something worth saving, more than just a fish. □



# "SUSTAIN ISRAEL IN THE MOUNTAINS"



Re-negotiating Temple Trail by jeep.

By **BARBARA PRICE**  
Public Affairs Coordinator  
BLM Arizona Strip District Office, St. George, Utah



## ***They carved a road through rock***

**A**LTHOUGH SILVER had been found in the Dixie Valley's sandstone (and ultimately would yield \$12 million worth of ore), it was the cotton growing potential for clothing Mormon settlers which brought colonization to southern Utah.

With colonization came communities, and the communities created the need for a church. The year was 1861, the community was St. George, Utah, and the Mormon Temple which St. George Mormons erected was built of wood hauled from the nearest available source of timber, the wilderness of public land 80 miles to the south, in a triumph of pioneer courage and tenacity.

White men first settled in the southern part of the Utah Territory in 1850, and missionaries to the Indians had been in southern Utah since 1854. Reports trickled back of a semitropical but dry climate. The first farmers shipped out harvests of fruit, vegetables, and grains to the rest of the Utah Territory where Mormon settlers had been trying to tame the inhospitable land since 1847.

In 1855 the first cotton north of the Mason-Dixon Line had been planted, giving the valley its name: Dixie. The agricultural promise of the valleys between the rugged mountains to east and west was justifying the faith of the families who intended to take the arid land which nobody wanted and make it bloom and prosper as a haven for their religious faith.

There was no way for pioneers to get title to the land they reclaimed from the desert. The Homestead Law would not be signed by President Abraham Lincoln until May 20, 1862, and even then no General Land Office would be opened in Utah until 1869. (This office in Salt Lake City remained a stronghold of public land actions and was the national headquarters of the General Land Office until it and the Grazing Service were merged in 1946 into a new Federal agency, the Bureau of Land Management.)

Mormon settlers struggled with the land according to the practices of the Church of Jesus Christ of Latter Day Saints, holding 20 to 40 acres for their own subsistence while helping later arrivals get a foothold and irrigate adjacent acres into tillable farmland.

The settlement of Utah was largely self-contained and inward centered. Fresh from religious persecution in the east, the leaders of the Mormon Church in Utah discouraged mineral development or anything that would

divert the people from agriculture and the slowly growing stable economy they were creating.

There still was nothing but overland freight to bring in needed merchandise. The pony express passed far to the north, serving Dixie Valley settlers not at all. When the overland telegraph was completed in 1861, the pony express ceased to exist, and Dixie would have to wait until wealth and opportunity provided the chance to establish telegraphic connections.

This was the way things were when the church officials decided in 1861 to launch the Dixie Mission. "Sustain Israel in the mountains," ordered the Mormon Church in decreeing the large scale colonization of extreme southern Utah Territory.

There was economic logic as well as evangelistic zeal involved in the colonization order. Although the southern Utah valley known as Dixie had a reputation for being hard to wrest a living from, it had the advantage of good, fertile soil, and a subtropical climate for agriculture. Cotton growing would be a first step to providing clothing for the Mormons without traffic with the outside world.

Since 1852, when plural marriage had been proclaimed to the world as a Mormon doctrinal tenet, the main body of Mormons in Utah were looked upon with even more disfavor than what they had experienced in the eastern United States. Understandably then, the Mormons avoided contact with a hostile public where possible.

Opportunities to avoid contact were diminishing, however. In 1861 Mormon leader Brigham Young saw Utah Territory's borders nipped off by establishment on the west of the Territory of Nevada and on the east by the Colorado Territory.

There was agitation already building on the northern border for establishment of the Wyoming Territory. In just 7 more years, by 1868, this line would be drawn, fencing in the Utah borders on the north, east, and west.

To the south, the Arizona strip was bound to Utah and the Mormons by tradition and custom. The settlers had ranged cattle herds on some of its lush valley grasses, and cut its timber for building needs. Most of Utah's forested areas were in the mountains far to the north, and the Dixie Valley was almost treeless.

So it was to the high country of the Arizona strip that Dixie turned when the community of St. George laid its plans to build a Mormon Temple in the thriving settlement. (Ironically, there was wood aplenty on the St. George site, but the Mormons had missed it by 100 million years, and now it was turned to stone, petrified wood.)



Trumbull Mountain, about 80 miles south of St. George and edging the present day Kaibab National Forest at an elevation of 8,000 feet, was known to have abundant virgin stands of ponderosa pine. However, the trackless way bespoke hauling problems. With great determination then, with wagons and teams of oxen, the settlers banded together to break a trail through this remote wilderness.

From St. George they headed south and east to the old fort on Fort Pierce Wash, then turned south going down an area known as Hurricane Valley. The valley's rolling hills were a welcome respite after moving along canyons and across rocky draws. However, the trail soon headwalled against the Hurricane Fault, an abutment that would—even today—defy engineering genius. This wall-like cliff, which runs the north-south length of the strip country, is a natural barrier that can be traversed only in two or three places throughout its 50 miles of twisting and turning.



Hurricane Fault.

Not to be thwarted, they moved boulders by hand and carved a roadway up the face of the cliff to clear the route for wagon traffic. The gouges cut by ironclad wagon wheels are still visible on rocks along the route up the cliff. Once the wagons made it to the plateau atop the Hurricane Fault, the trail cut south toward Trumbull Mountain where the pioneers built a sawmill. Most of the timber cutting took place adjacent to this sawmill, located near Nixon Springs, just below the top of Mount Trumbull. Little is left at the mill site today, but visitors still can see original corner posts and a little searching likely will turn up some ancient square nails.

It took 7 days for oxen teams to haul their load from the mill to the temple site. During summer, workers at the mill hauled timber farther down the mountain so hauling could continue throughout long winter months. During the 6-year period more than 1 million



Trail marker near north end of St. George Temple grounds.





board feet of timber was hauled. The timbers (or beams) were in lengths of 26 to 46 feet and were 12 to 24 inches square. This was arduous physical work in the high, thin air of Mount Trumbull, accustomed as the pioneers were to the 2,880-foot altitude of St. George.

All this took place a century ago. The devout Mormons, intent upon their objective to build their House of the Lord, overcame formidable hurdles in building the road, in wresting the timber from the Arizona Strip's mountains, and in hauling it to St. George. The trail was cut in 1871 and was used until 1876.

Utah was not admitted to statehood until 1896, when it became the Nation's 45th State. Arizona had to wait until 1912, when it became the 48th State. The Mormons, however, completed their temple at St. George in 1877, and Brigham Young dedicated it 2 months later, scant months before the death of the grand old patriarch of the Church of Jesus Christ of Latter-day Saints plunged the denomination into mourning.

An imposing edifice it was: 144 feet 8 inches by 93 feet 4 inches; 84 feet high with a 175-foot tower. The foundation required 17,000 tons of stone—and the timber hauled over the tortuous Temple Trail.

Marking the Temple Trail was long dreamed of by northern Arizona and southern Utah people. To accomplish the project required joint efforts of church officials, private citizens, and two Federal Government agencies. The entire trail has been located and 93 markers installed to permanently identify the trail. The millsite was jointly designated by BLM and Kaibab National Forest, with an interpretive marker at the old sawmill location.

Some of the trail between St. George and Mount Trumbull crosses land administered by the Bureau of Land Management, while the southern terminus of the route is on land administered by the U.S. Forest Service of the Department of Agriculture.

"We felt the Temple Trail played a very key role in the building of the West, and it was an important influence on the people who settled this area," said BLM Arizona Strip District Manager Garth M. Colton.

Thus it was that on November 8, 1971, a 100-vehicle caravan carrying 350 people left St. George to retrace Temple Trail over its 80-mile length and officially dedicate it at the end of the journey on Mount Trumbull, a journey completed in several hours compared to the 7 days it had taken just a century ago.

The wagonmaster was Phil Foremaster of St. George, chairman of the BLM Arizona Strip District Advisory Board. Although the road is still a dusty one, the trip was a far cry from what pioneers had to endure following the trail in the 1870's. A BLM interpretive sign



Spelling of "forrest" being corrected.

stands atop the Hurricane Fault, and from this vantage point there is a spectacular view of Hurricane Valley. To prove that the Temple Trail was still passable, Andrew O. McArthur, a member of the St. George Temple Presidency, drove a jeep all the way down to the valley and back up again on the Temple Trail original path. His difficult feat drew gasps of apprehension as he gingerly braked the little vehicle down from the summit and bulled it back up again. Many doubted it could be done in a modern vehicle.

Members of the caravan later enjoyed barbecued meat, dutch oven potatoes, and refreshments at the millsite on Mount Trumbull. Personnel of the BLM Arizona Strip District assisted with cooking and serving the meal. Then followed a series of speeches and tall-tale telling.

Guests were much interested in comments by 94-year-old John Schmutz, a pioneer St. George resident who traveled the Temple Trail many times with his father as a young boy. An agile, clear-minded man, he recalled much history and lore of the times. Also featured was Owen B. Wright, a retired 65-year-old former BLM employee in the Strip, who helped generate action to have the Temple Trail preserved and marked.

Through the interest and cooperative action of private and government interests, Temple Trail can be enjoyed by the visitors to these remote parts of the public lands, where doughty pioneers carved a road through rock to "sustain Israel in the mountains." □





**Palm trees grow in  
natural fireless cooker**



# A REMNANT OF ARIZONA'S YESTERDAY

**I**SOLATED in a deep canyon fringing the rugged Kofa Game Range in southwest Arizona is a botanical phenomenon unique in this desert State: palm trees growing where it makes no sense for them to grow.

These last remaining native *Washingtonia filifera*, are a remnant of Arizona's yesterday, a time when the hot humid climate contributed to lush vegetation.

Some 50 to 60 of these trees remain today in the 30-foot-wide canyon which faces south and gets but a few hours of direct sunlight daily. The narrow sides of the red granite canyon reflect and store the heat like a fireless cooker, perpetuating the trees. The 30-foot-high palms have a self-pruning characteristic which assures that they will not outgrow their space.

A parking area near the mouth of Palm Canyon is easily reached on a 7-mile graded road that turns off State Highway 94, 20 miles south of Quartzsite and 60 miles north of Yuma. From this point, a well marked trail leads one-half mile to the main grove of palm trees.

Another canyon with even more examples of native palms recently was located approximately 2 miles south of Palm Canyon. This gorge, named Fishtail Canyon, is more difficult to reach, requiring about 2 miles of rugged hiking from the Palm Canyon parking area. Hikers should carry water and be alert for rattlesnakes along the trail. □

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By **KEN WHITE**

Recreation Specialist  
BLM State Office, Phoenix, Ariz.

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# THEY PAID THE FIDDLER GLADLY

*The bike riders were  
true to their word*

THE WINTER day dawned clear and crisp. Mountains to the east were covered with snow, and patches of snow lay in the shadows of the hills and gullies of Five Mile Pass. Soon after 8, as people began to arrive, the staccato roar of motorcycles shattered the chill winter air of the desert.

The Desert Striders Motorcycle Club of Tooele, Utah, was conducting its first motorcycle race. For more than a month the Salt Lake District Office of the Bureau of Land Management had been working with the Desert Striders to draw up a special land-use permit which would provide a race course for this contest. The problem was to insert stipulations to protect, or at least rehabilitate, the frail desert plant communities through which the race was to be run.







In the last decade the geometrical increase of off-road vehicles has given public land managers a lot of headaches as they cope with the need to recognize a legitimate use of the public lands and, at the same time, a need to protect the resource from the problems of such use.

For example, in 1960 there were 540,000 motorcycles and trail bikes in use throughout the country. By 1969, this number had multiplied more than fourfold to 2,250,000. Of four-wheel drive vehicles there were 115,000 in 1960, but 1,700,000 by 1969. Add in all-terrain vehicles, dune buggies, and snowmobiles, and the problem already has king-size dimensions for BLM with 451 million acres of public lands to administer.

The industry which manufactures these pleasure vehicles estimates that by 1976 there will be more than 7 $\frac{3}{4}$  million off-road vehicles in the hands of private owners, all vying for space for their recreational use.

Environmental impacts of off-road vehicles on the lands sometimes are devastating. Erosion is a constant problem. Aesthetic deterioration is always a potential.

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By **JOHN D. CARLSON**  
 Natural Resource Specialist  
 Manager Lakeside Resource Area  
 BLM Salt Lake District, Salt Lake City, Utah

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Wildlife habitat may be damaged or destroyed. Pollution—air, noise, and litter—irritates other users of the public lands. Archaeological and historical values have been inadvertently damaged. The land frequently is degraded by off-road vehicle use.

On the other hand, the economic impact of the off-road vehicle is staggering. The sale of off-road vehicles amounts to \$6 hundred million annually. When the expenditures for gasoline, oil, services, and accessories are added, the total is well over \$1 billion.

New life has been given to communities and the resort owners who once depended upon a single season for their annual income. These factors, along with environmental problems, are factors which land managers must consider when making decisions relating to off-road vehicle use.

In the case of the Desert Striders Motorcycle Club, the race course was to cover a more or less circular route through hills covered with sagebrush, shadscale, and juniper. Each rider would circle the 8- to 10-mile course four times and the first man to survive the gullies, ridges, and rocks, and come through standing up would be the winner. While the prospects of such a race were tremendously exciting to the cyclists, the BLM people were looking long and hard at some real problems.

They knew that trails would be cut into the thin desert soils, and that the earth-protecting vegetation





would be killed on these trails. The only practical solution was to ask the cooperation of the Striders to reseed the trails and to dig water bars across the trails on the hills and slopes where the water would run. These water bars would turn aside the overland flow of water out

of the trails periodically, on to the vegetated soils alongside. This would avert erosion and the formation of gullies.

But—would the Striders go for the idea? It would mean a lot of work. The water bars would have to be hand dug and the whole route seeded. The question was put to them and they agreed. A small bond was required, the stipulations were made part of the permit, and the race was set to go.

Some BLM people were skeptical about the Striders' sincerity. Some felt it would not be possible to rehabilitate the trails adequately. But all could see that motorcycles are here to stay, and that solutions must be found to meet and solve some of these most serious problems.

At about 11 a.m. under a brilliant sky, a shotgun blast sent about 60 riders scrambling up the old abandoned Union Pacific Railroad grade to their waiting motorcycles. When the rider reached his bike, he was clear to start the machine and take off—the race was on!

On Saturday a week later the Desert Striders met with BLM people to begin rehabilitation work. About 20 cyclists turned out with shovels and considerable enthusiasm. Under BLM instruction, they started digging water bars on the first hill. Two riders mounted a motorcycle back to back. The rider on the rear held the first sack of crested wheatgrass seed in his lap, and, nearly falling off as the motorcycle took off in a spray of rocks and gravel, these two were off to cover the entire race course. Throughout the afternoon they could be seen dashing through the trees and over the far hills scattering seed as they went. They did the job in fine style.

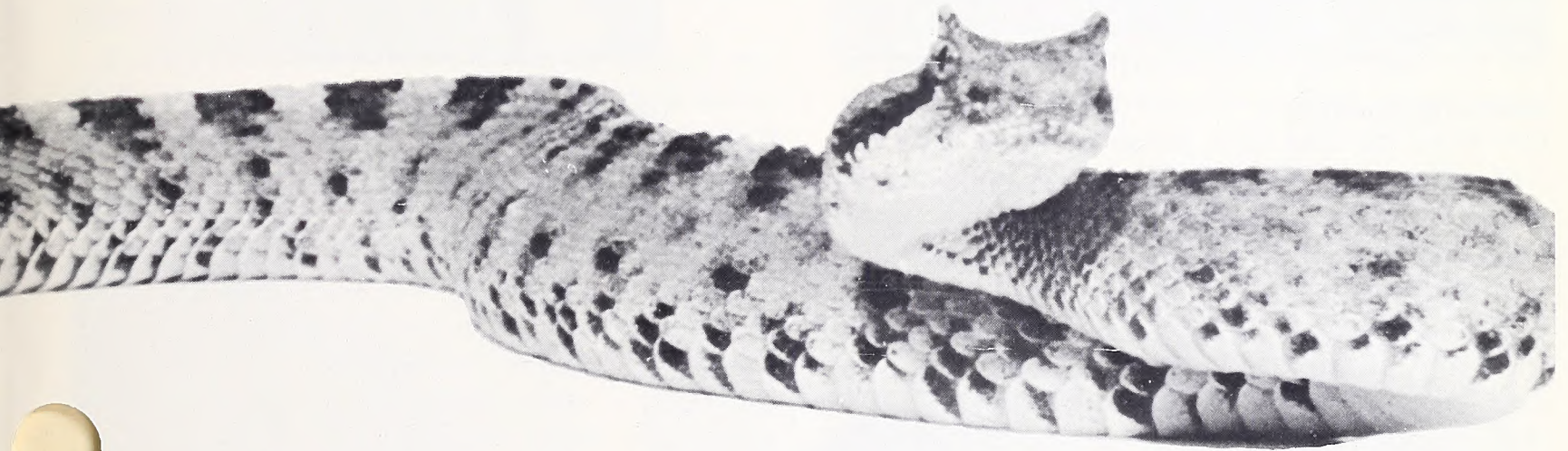
The job was more than the Striders could complete in one day. Winter set in, and it was spring before they could get back to complete the job. But complete the job they did, and their bond was returned with a note releasing them of further responsibility. Moreover, the starting point and parking area, which was situated on private land, was cleaned up also. Not even a gum wrapper remained.

Only time will tell how effective our efforts were at Five Mile Pass. BLM people will go back to see if the seed, so dramatically broadcast along the trail, is growing, and if the water bars are turning the water out of the ruts. But, whatever happens, in at least this one instance a group of people cared enough to come back and put things right again.

As the old proverb goes, those who dance must pay the fiddler. The Desert Striders Motorcycle Club provided an example which holds promise for solving conflicting value and conflicting land use problems. They paid the fiddler gladly. □



# THE GREAT SNAKE FAKE



Sidewinder rattlesnake.

*Everybody knows that snakes will bite you if they can, and most snakebites are poisonous. While rattlesnakes always rattle before they strike, they will chase you for miles if necessary.*

All of this is wrong enough to kill you. Facts about the snakes are even more amazing than these fictions. Since the visitor to the western public lands may encounter some snakes, it's in order to sort out fact from fiction.

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By **DAVID L. DOTY**

Safety Engineer

and

**KERRY L. CARTIER**

Public Information Specialist  
BLM State Office, Reno, Nev.

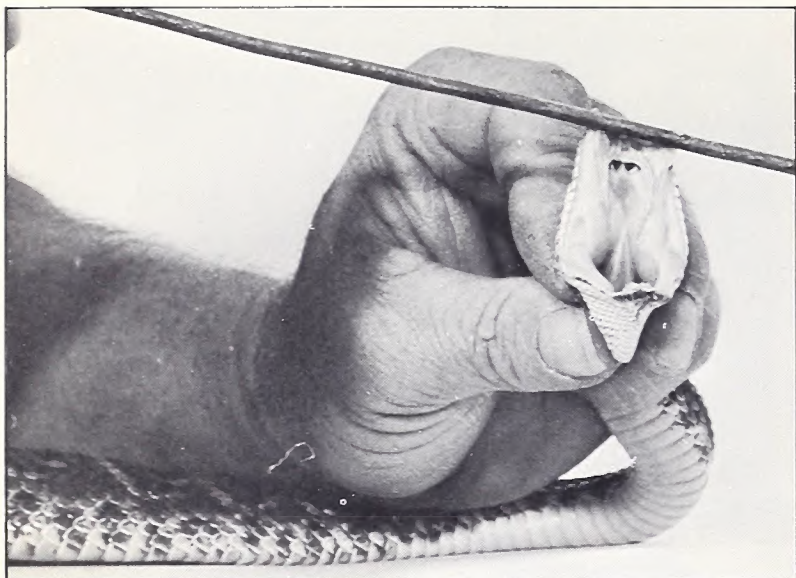
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For example, snakes are not vicious animals that attack for no reason. Most snakes are more afraid of people than most people are of snakes. Most attacks, if they can be called that, are defensive: a human being is too big to swallow. Most snakebites are not from poisonous snakes, but if any snake bites you, you should always see a doctor. There is a danger of infection from a snake bite, since a snake's mouth is no cleaner than any other animal's.

Many of the snake stories of the Old West involve rattlesnakes: it's said that western States have so many rattlers that it's impossible to take three steps without one of them being on a rattlesnake. Most of the tales about rattlesnakes are just that—tales. Many westerners have never seen a rattlesnake, except in captivity.

Why a rattlesnake has rattles is a question even snake experts haven't answered adequately. Certainly the rattles aren't used as a warning. Why should a snake which





Mojave rattlesnake.



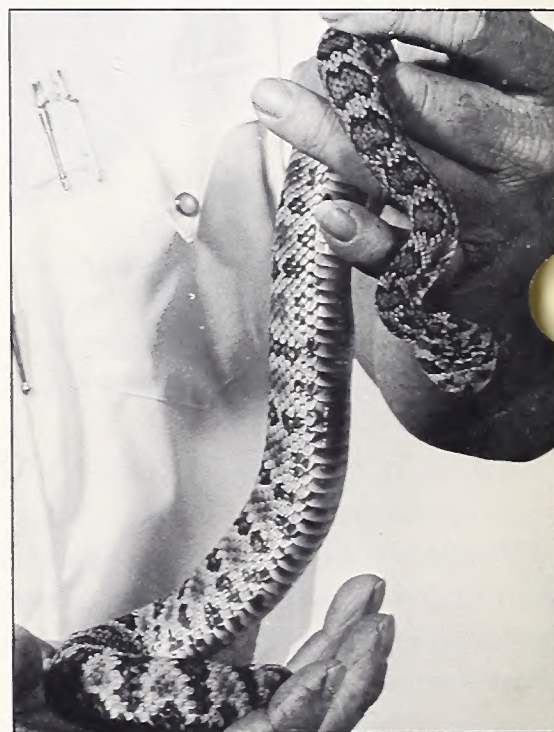
Gila Monster.



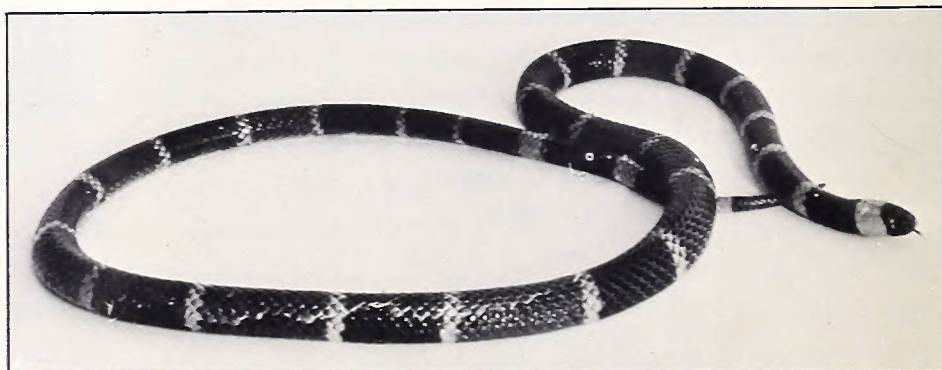
Copperhead.



Rattles of older, mature Western Diamondback rattlesnake.



Great Basin rattlesnake.



Coral snake.



catches its food rattle its rattles before it bites and possibly scare the food away? A rattlesnake may rattle and may not, so just because a snake bites and doesn't rattle first is no guarantee the snake is not a rattlesnake.

The rattles, which in folklore are added one a year, are added whenever a snake outgrows his skin and sheds it. Since rattles can be broken off or damaged, the number of rattles is no way to tell a snake's age. Even if the rattle chain is complete and undamaged, the number is not indicative of age unless you're a real expert. Here's why:

A snake sheds its skin three times in its first year, so a rattler would add three buttons which become rattles. In its second year, the snake sheds its skin twice. Thereafter, it sheds its skin once a year, except that this annual practice doesn't always apply when the snake passes from maturity into old age.

A snake is capable of travel almost anywhere. It can climb trees, cross fences, swim rivers, and climb mountains of slippery oil shale. But it can manage only short bursts of speed, to a maximum of 5 or 6 miles an hour, and only for a short period of time. A man walking swiftly can easily outdistance a snake.

A snake lives in a world of perception far different from our own. It lives close to the ground and swallows food whole, and its vision and sense of taste is poor. It compensates with other senses. A snake can sense the footfall of a mouse many yards away, but a birdcall might go unheard. A snake responds to "sound" vibrations with its entire body instead of hearing with a specialized organ such as an ear. A snake is actually deaf, and only a few species have ears. The snake has a sense of smell which is far developed over man's, and the snake smells with its tongue.

While its world is far different from ours, a snake shares some very human problems. A snake can get ulcers, gall bladder trouble, heart diseases, skin parasites such as mites, constipation, mental problems, and pneumonia. Because a snake has only one lung, pneumonia is usually fatal. A snake can yawn, cough, sneeze, sunbathe, and take baths. For a snake, arthritis or backache can be a great problem.

The snake is not a delicate creature. A rattlesnake was run over by a car in New Jersey, and the driver backed over the snake to be sure it was dead. When the driver got out to pick up the dead snake, the angry and very much alive snake bit the man.

Because snakes have no temperature control and are coldblooded, they must constantly seek a balance between temperatures in their environment to keep their body temperature at functioning levels. An overdose of sunshine can become a fatal sunstroke, but a cold spell

can mean a snake with relatively little pep. While a snake has less energy on a cold day, most snakes go deep into the ground and avoid freezing completely.

In a controlled experiment testing metabolism control for the National Aeronautics and Space Administration, a snake was fed only on water for 365 days and survived without ill effect.

Snakebite is a happening which most people fear but know little about. It's mostly fear that causes death from snakebite. Experimental evidence indicates that venomous snakes meter the amount of venom they inject depending on the size of the animal. Mice, for example, get less venom than rabbits. When a rattlesnake bites a human being, the amount of venom is usually less than necessary to kill him—but plenty to make him seriously ill.

How the snake meters the amount of venom is a matter for conjecture. Snake experts believe generally that the metering is an instinctive process of the snake, but it is known that the pit viper voluntarily contracts the muscles controlling the discharge of venom. In other words, the pit viper is exercising a conscious judgment.

Although there are divisions of opinion in veterinary medicine, the preponderance of evidence indicates that a snakebite does not cause rabies because rabies infection is not carried by coldblooded animals.

Many of the known facts about snakes have been gathered through keeping snakes in captivity to milk their venom for the manufacture of antivenom. Rattlesnake venom, incidentally, is worth \$35 per dry ounce. At the other end of the scale is the venom, which is worth about \$16,500 a dry ounce, collected from extremely lethal but rare snakes not found in this country.

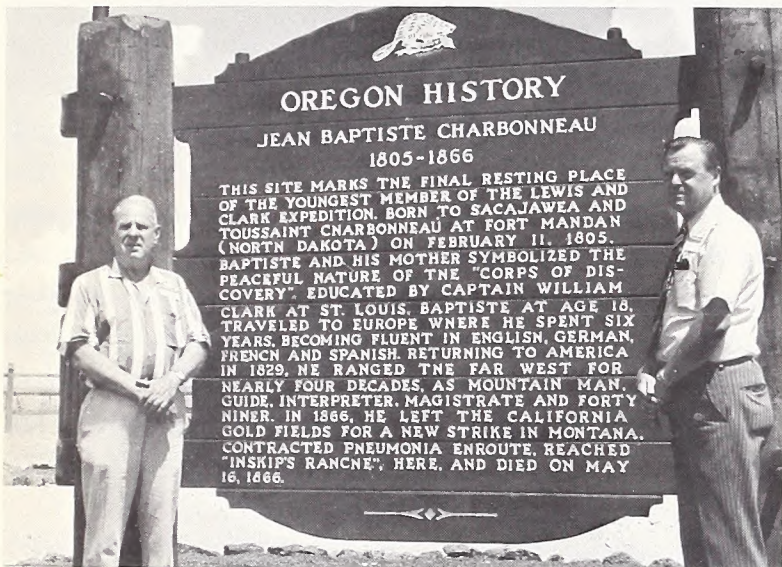
The snake, like any animal, can detect human fear. The snake's predatory instinct prompts it to strike an individual whose fear is detectable.

Never handle any snake unless you are qualified or are willing to take the consequences of being bitten. A little knowledge about snakes is enough to cause you to do the wrong thing, and the results of this can kill you. Snakes are animals which can't be trusted, but they should be respected. Learn enough to respect snakes.

This is exactly what the so-called snake charmers have done. The music they play as the cobra weaves back and forth above the basket is of course unheard because the snake is deaf. The musical instrument is just showmanship; a finger swaying back and forth would hypnotize the snake into docility just as well. The snake charmers are capitalizing on their knowledge that the snake can't shut off the sight of the hypnotic movement. It has no eyelids, either. □



# HE RESTS AT THE END OF THE TRAIL



William Clark Adreon, left; author Irving Anderson, right.

**H**ISTORY is ever present to Oregon residents. They regard it not as a dim, almost forgotten past, but as a living heritage of recent time. It could hardly be otherwise, for the land is peopled with descendents of the stalwart pioneers who settled what one writer has called that "lovely dappled up-and-down land called Oregon."

Many of those descendents were in the audience of more than 200 persons, who in August 1971 attended ceremonies which permanently marked the grave of Jean Baptiste Charbonneau.

Charbonneau, son of the Indian woman Sacajawea and the French-Canadian Indian Toussaint Charbonneau, was a baby in arms on the famed Lewis and Clark

expedition which blazed a trail from Missouri to the Pacific Ocean in 1805. In manhood he became a well-educated, widely traveled guide, explorer, hunter, trapper, mountain man, scout, linguist, magistrate, and humanitarian. Charbonneau is accorded a place in western frontier history as a truly remarkable man and a cul-

tural anomaly for his time. (See "Sacajawea's Papoose," *Our Public Lands*, Winter 1971.)

After a full career, at age 61 the restless traveler joined a party headed for a new goldfield in Montana. Forging the Owyhee River in 1866, he was unable to dry his clothing and gear, contracted pneumonia, and died at a stage coach waystop a few days later.

Until recently his grave was marked only with a wooden headstone placed there by local schoolchildren. Then a simple sign was added by the Jordan Valley Commercial Club.

But history-conscious Oregonians were not content to let the gravesite remain so. Through a heart warming volunteer effort, they have protected and preserved the gravesite at what is now Danner, Oreg. Participation was by local citizens, mostly. However, many contributions came from persons and firms throughout Oregon, Idaho, Washington, California, and as far east as Missouri and Ohio.

The gravesite was located on privately owned land within the Bureau of Land Management's 4.6-million-acre Vale District. Now the owner of the ranch land has donated the site of the burial plot to Malheur County.

Planning, design, and construction of site facilities came largely through donated funds, materials, and labor. The Malheur County Chapter of the Daughters of the American Revolution and the Oregon Historical Society each provided a handsome bronze plaque. A quarry owner in adjoining Baker County donated a large, rustic granite headstone. A lumber firm in Klamath Falls furnished a flagpole; another lumber firm in Burns gave guard posts.

Congressman Al Ullman of Oregon's Second Congressional District provided an American flag which symbolically had been flown over the Nation's Capitol on May 16, 1971, the 105th anniversary of Char-

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By IRVING W. ANDERSON

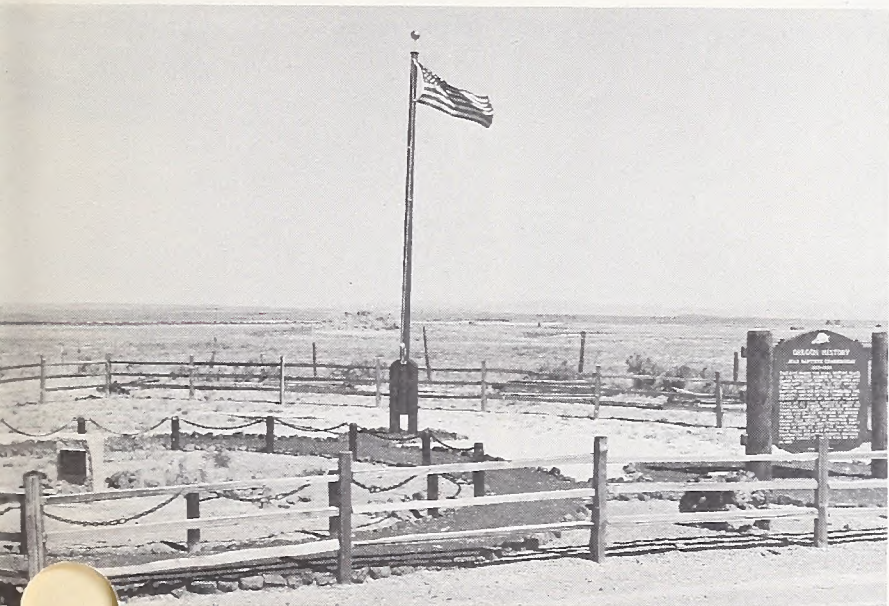
Chief, Division of Lands and Minerals  
Program Management and Land Office  
BLM State Office, Portland, Oreg.

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Charbonneau's death. Governor Tom McCall gave a State flag which had been flown similarly over the Oregon Capitol in Salem.

Malheur County provided surveying services, and both the county and the State made equipment and labor available for necessary road relocation, materials hauling, and site preparation. The State also furnished a rustic "Oregon History" sign, which interprets Charbonneau's remarkable life.



Charbonneau forded Owyhee River here on BLM lands.

BLM fire crews stationed at nearby Jordan Valley donated many off-duty hours of labor toward site preparation and installation of the flagpole, interpretive sign, fences, monuments, and plaques. More than \$1,000 in cash to purchase materials was donated by individ-

uals, firms, and local groups who held rummage sales, a church dinner, and other fund-raising enterprises.

On August 6, 1971, the site was dedicated in a ceremony befitting the man Charbonneau, and the romantic period of America's manifest destiny in which he lived. In all, more than 200 persons attended the dedication, including dignitaries representing governmental, educational, historical, and regional interests. It is no wide stretch of the imagination to conceive that the grandfathers and great-grandfathers of those who attended the grave-marking ceremonies may have rubbed shoulders with the wide-ranging Charbonneau.

An Idaho National Guard contingent, outfitted in cavalry accouterments of the 1860's, smartly executed a military flag raising, punctuated with salvos fired from a fieldpiece representative of those used in frontier skirmishes.

Climaxing the ceremony was an appropriate dedication address given by William Clark Adreon of St. Louis, Mo. Adreon is the great-great-grandson of Capt. William Clark, the explorer who saw to Charbonneau's education. Adreon's presence, together with that of Owen Buxton of Emmett, Idaho, the great-grandson of Lewis and Clark Expedition member Sgt. Patrick Gass, provided a unique dimension to the event.

Their lineage directly linked contemporary America to President Thomas Jefferson's dream that the fledgling nation would someday span the breadth of the continent. Indeed, it was their forefathers who had set the stage for American expansion to the Pacific, to be followed by rugged Oregon settlers who ultimately secured the vast Oregon Territory for the United States. The descendents of many Oregon pioneer families also present at the dedication added still another link to the chain of living Oregon history.

National recognition of the Charbonneau gravesite and the ruins of nearby Inskip Station (where he died on May 16, 1866) is pending. Both sites have been nominated under the National Historic Preservation Act for entry into the National Register of Historic Places.

So, the final chapter in the life story of one of America's romantic frontiersmen ended fittingly in the quiet immenseness of the Oregon country he helped claim for America, only a few miles from the mountain homeland of his Indian mother Sacajawea. As William Clark Adreon eloquently closed his dedication address: ". . . he rests here forever, at the end of the trail, in Oregon." □



# MONTANA'S SILVER SAGE



Sage grouse, among other wildlife dependent on big sage leaves for winter food.

## *Home and food for pronghorn*

**S**AGEBRUSH in north-central Montana—the scattered clumps of the storied West and the low-hugging variety that silvers from reflected light—has a greater role than mere scenic decoration. For many pronghorn antelope, sagebrush is home and survival food for as long as 5 months a year on the limited Milk River Hills winter range north of Malta.

One of the largest concentrations of antelope on record, usually numbering in the thousands during a severe winter, crowds in from scattered summer homes in Saskatchewan and the northern Montana counties.

Since this is public land, the BLM Malta District Office is engaged cooperatively with Montana Game and Fish officials and their Canadian counterparts in assuring a balanced multiple use of the land resource for the future management of these herds.

In mild winters, limited concentrations of pronghorn turn up along silver sagebrush tributaries in northern Montana, even penetrating shallowly into southern Saskatchewan. But snow accumulation drives the herds south for available food in severe winters. Checking the hunters' harvest demonstrates the case: tagged Montana antelope have been found to migrate as far as 20 to 70 air miles, while the Canadian pronghorn have

been known to migrate as far as 100 miles south to the winter range.

This range is the northernmost extension of sage in north-central Montana and adjacent Canada. The condition of this habitat appears to be the key factor affecting the survival and productivity of the Montana and Canadian pronghorn wintering there.

Wildlife managers know that the mortality rate of big-game species tends to increase proportionately as herds exceed their food supply and space requirements. To increase herd fertility and reproduction, the animals need more forage than just what is essential for survival.

BLM's Malta District Office and the Montana Game and Fish Department are concerned primarily with assuring that the winter range forage is in appropriate quantity and quality. However, the summer range re-

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By **JACK D. JONES**

Wildlife Management Biologist  
BLM District Office, Malta, Mont.

and

**CHUCK MOST**

Public Affairs Officer  
BLM State Office, Billings, Mont.

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Part of pronghorn herd which winters on Milk River Hills range north of Malta.



BLM habitat management plan aims to improve continued deterioration of browse plants.

quirement also is important. Both must be considered in making environmental management decisions. To establish wildlife appropriately under the multiple-use principle, BLM has developed a habitat management planning system for areas such as the Milk River Hills winter range.

Restoration of the habitat through management of key native forage plants will be the primary goal in the future management for improving the pronghorn winter range. Vegetative management and maintenance of key sagebrush communities are BLM's fundamental responsibilities on these public lands.

Such other uses as livestock grazing also enter the picture. Cattle will graze the silver sagebrush during late fall and early spring, especially when other forage plants are unavailable under snow. Future livestock grazing on the winter range will be planned to minimize this overlap in food habits and range use. Through BLM's allotment management plan, periodic rest of key areas is possible by developing a rest-rotation or similar grazing plan. Periodic rest allows for a complete growth cycle of the key plants uninterrupted by livestock use.

Migration studies between the Montana Game and Fish Department and the Provincial Government of Saskatchewan, Department of Natural Resources, Wildlife Branch, are underway to determine relationships of resident and Canadian pronghorns using the winter range but summering in Canada and Montana. Results of the migration studies will make it possible to manipulate, by harvesting, the particular pronghorn populations that use the winter range, thus bringing wintering populations more in line with the amount of available winter forage and allowing the existing browse to improve.

Intensive study of vegetation has been confined largely to important wintering sites used by pronghorns on the winter range. The poor condition of the sage on some portions of this range was the factor which resulted in its being selected as the site for conducting habitat studies to show the winter use and vegetative changes that are occurring to the range.

BLM habitat studies show present conditions ranging from no significant improvement to continued deterioration of browse plants on key sites used by pronghorns and/or livestock.

Two 5-acre, totally protected plots which exclude all pronghorn and livestock use were built on representative habitat types on the north and south portions of the winter range. Vegetation is being sampled inside and outside these plots in cooperation with the Montana Fish and Game Department. Sagebrush, forbs, grass, and soil conditions are being measured.

The studies will provide a base for measuring the recovery rate of sage under complete protection against the changes taking place outside the exclosures. Throughout the winter range, other browse studies are being conducted on other key sites. The information thus gathered will form a foundation for analyzing habitat condition trends.

The winter range also provides important year-round habitat for sage grouse common to the sagebrush environment. Other important wildlife species involved in the habitat management plan area include mule deer, white-tailed deer, sharp-tailed grouse, and Hungarian partridge.

An improvement in the winter range will produce higher antelope population and, therefore, greater numbers available to the hunter. In Montana as well as Saskatchewan the outlook is for greater public demand for pronghorn hunting. Pronghorn antelope constitute a natural resource of very great importance. BLM's multiple-use plan will manage this wildlife resource wisely and, at the same time, will manage these public lands as a total environment. □





This is a compilation of the most up-to-date information possible on up-coming sales of public lands by land offices of the Bureau of Land Management. For details of land descriptions, prices, and other information pertinent to sales, you must write the individual land office concerned. In most cases, there are adjoining land-owners who have statutory preference rights and may wish to exercise them to buy the land. Sales notices will point out, insofar as possible, problems relating to (1) access, (2) adjoining owner preference rights, (3) small-tract sales limitation of one per customer, and other pertinent information. When possible, all sales are scheduled far enough in advance so ample notice can be given in Our Public Lands. Sales listed can be canceled on short notice for administrative and technical reasons. A listing of BLM land offices with addresses is found on the opposite page.

#### ARIZONA

1,058 A, identified as A 3481 and A 3482. Parcels 1, 2, and 3 located 4 miles northwest of Navajo, Arizona, adjacent to Navajo Indian Reservation. Parcels 4 and 5 located approximately 2 miles east of Navajo, Arizona. Parcel No. 6 located 9 miles south of Sanders, Arizona. No utilities, elevation approximately 5,500 feet. No appraisal.

10 A, identified as A 3737, approximately 10 miles west of Phoenix, 3 miles north of Goodyear and Avondale, Arizona. Legal access available, elevation approximately 1,089 feet. No utilities on tract. Appraised value \$4,000.

120 A, identified as A 5983, approximately 1 mile south of Mammoth, Arizona. Electricity available, no developed water, legal access, land moderately steep hills and ridges. Elevation 2,500 feet. Approximate appraised value \$30,000.

280 A and 79.29 A, identified as A 6152, 7 to 8 miles northeast of Bisbee, Arizona. No electricity, water, or physical access. Land nearly level, small wash crosses property. Elevation approximately 4,150 feet. No appraisal.

5 A, identified as A 6358, approximately 2 miles south of Mammoth, Arizona. No developed water, accessible by county road, land moderately steep slopes. Elevation approximately 2,600 feet. Appraised value \$3,000.

160 A, identified as A 6627, approximately 11 miles southeast of Navajo, Arizona. Elevation approximately 6,000 feet. Grazing land. No appraisal.

#### CALIFORNIA

.68 A appraised at \$1,800 and 12.27 A appraised at \$9,500, identified as S 2413. Near Nevada City in Nevada County. Suitable for residential use. No public road access, no water.

13 parcels, identified as S 4886, in Stanislaus and Santa Clara Counties. Suitable for hunting and limited grazing. No public road access, no water. Appraised at \$50 per acre.

39.93 A, identified as S 3911, in Stanislaus County. Suitable for hunting and limited grazing. No public road access, no water. Appraised at \$2,400.

#### NEBRASKA

7.6 A 13 miles northeast of Springview, Keya Paha County, abut South Dakota state line just west of Keya Paha River. Typical dryland grain-grass areas. Surrounded by privately owned lands, no legal access. Query Wyoming State Office for costs, other details. Sale after May 1.

#### NEW MEXICO

40 A and 80 A, 5 miles northeast of Cebolla, Rio Arriba County, New Mexico. Cebolla is approximately 80 miles north-east of Santa Fe on U.S. 84. Tracts adjacent to Carson National Forest in lower slopes of San Juan Mountains. Extremely scenic setting. Only 5 miles to Trout Lakes, a group of small spring-fed lakes with camping and picnicking facilities, good trout fishing. Good hunting area. Terrain flat to gently sloping, 8,200 feet elevation. Vegetation ponderosa pine, oakbrush, juniper, sagebrush, western wheatgrass. REA powerline 1¼ miles from tracts. Legal access via county and U.S. Forest Service roads. Appraisal \$100 per acre.

#### SOUTH DAKOTA

40 A, identified as M 17525 (SD), isolated, approximately 3 miles northwest of Fairburn, Custer County, South Dakota. Rough, broken land, numerous limestone outcrops, bare clay banks. Cover essentially grassland type, a few scattered juniper trees. Grazing capacity estimated 10 A per AUM. No water nor legal access. Query Montana State Office. Appraised \$840 plus advertising cost. Sale May 25, 1972.





Goshute Creek pond (see story on page 4).

## UTAH

40 A isolated, identified as U 13109, approximately 3 miles northwest of Grantsville, Tooele County, Utah. No legal access, private roads extend to and parallel boundary. Land level, soils deep clay loams, highly alkaline. Vegetation salt desert shrub type. No surface water but springs in area indicate potential ground water. No improvements nor utilities. Not needed for any public management program. Description: T. 2 S., R. 6 W., Sec. 14, NE $\frac{1}{4}$ SW $\frac{1}{4}$ . Appraised \$4,000. Sale June 14, 1972.

25.78 A in 4 isolated irregular lots, identified as U-11031. Located in Bingham Canyon, 1 mile north of old Bingham Canyon Post Office, Salt Lake County, Utah, adjacent to Kennecott Copper Co. open pit copper mine. No legal access. Topography extremely steep. Soils shallow, rocky. Vegetation oak brush, sagebrush, grasses. No water, improvements, nor utilities. Not needed for any public management program. Description: T. 3 S., R. 3 W., SLM, Sec. 14, Lots 8, 9, and 10; Sec. 15, Lot 1. Appraised \$2,600. Sale June 14, 1972.

## WYOMING

80.57 A. Two tracts approximately 25 miles northwest of Pinedale, Sublette County. Both tracts surrounded by privately owned lands, no legal access. Topography gently rolling. Query Wyoming State Office for costs, other details. Sale after May 1.

1,440 A 13 miles northeast of Gillette, Campbell County. Surrounded by privately owned lands, no legal access. Strongly to very steeply rolling hills and badlands. Query Wyoming State Office for costs, other details. Sale after May 1.

## BUREAU OF LAND MANAGEMENT

**ALASKA:**  
555 Cordova St.  
Anchorage, Alaska  
99501

516 Second Ave.  
Fairbanks, Alaska  
99701

**ARIZONA:**  
Federal Bldg.,  
Room 3022  
Phoenix, Ariz. 85025

**CALIFORNIA:**  
2800 Cottage Way,  
Room E-2841  
Sacramento, Calif.  
95825

1414 University Ave.  
Riverside, Calif.  
92502

**COLORADO:**  
1600 Broadway  
Room 700  
Denver, Colo. 80202

**IDAHO:**  
Federal Bldg.,  
Room 334  
550 W. Fort St.  
Boise, Idaho 83702

**MONTANA (N. Dak.,  
S. Dak.):**  
Federal Bldg.  
316 North 26th St.  
Billings, Mont. 59101

**NEVADA:**  
Federal Bldg.,  
300 Booth St.  
Reno, Nev. 89502

**NEW MEXICO (Okla.):**  
Federal Bldg.  
P.O. Box 1449  
Sante Fe, N. Mex.  
87501

**OREGON (Washington):**  
729 Northeast  
Oregon St.  
P.O. Box 2965  
Portland, Oreg. 97208

**UTAH:**  
Federal Bldg.  
125 South State St.  
P.O. Box 11505  
Salt Lake City, Utah  
84111

**WYOMING (Nebr.,  
Kans.):**  
2120 Capitol Ave.  
P.O. Box 1828  
Cheyenne, Wyo.  
82001

**ALL OTHER STATES:**  
Robin Bldg.  
7981 Eastern Ave.  
Silver Spring, Md.  
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